

The diagram illustrates a chemical process for converting an olefin product into an oxygenated hydrocarbon product. The process involves several unit operations and material streams:

- Feed Streams:** METHANOL and WATER are introduced into unit 30.
- Unit 10:** An OLEFIN PRODUCT (represented by a circle) enters unit 12.
- Unit 12:** A rectangular unit that receives the olefin product and produces stream 16.
- Unit 26:** A trapezoidal unit that receives stream 16 and produces stream 28.
- Unit 30:** A rectangular unit that receives stream 28 and the METHANOL/WATER feed. It produces an OLEFIN PRODUCT (stream 32) and a stream (34) that enters unit 20.
- Unit 20:** A vertical rectangular unit that receives stream 14 (from unit 12) and stream 34 (from unit 30). It produces an OXYGENATED HYDROCARBON PRODUCT (stream 22) and a WATER stream.
- Recycle Stream:** Stream 18 is a recycle stream that exits unit 12 and returns to its inlet.

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graph LR
    OP1((OLEFIN PRODUCT)) --> U12[12]
    U12 -- 16 --> U26[/26/]
    U26 -- 28 --> U30[30]
    U30 -- 32 --> OP2[OLEFIN PRODUCT]
    U30 -- 34 --> U20[20]
    U12 -- 14 --> U20
    U20 -- 22 --> OHP[OXYGENATED HYDROCARBON PRODUCT]
    U20 --> W[Water]
    U12 -- 18 --> U12
    M[METHANOL] --> U30
    W2[WATER] --> U30
```

FIGURE